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ON THE APPLICATION OF THE GENERIC NAME  
MELODORUM OF LOUREIRO

By E. D. MERRILL

*Botanist, Bureau of Science, Manila*

The genus *Melodorum* was proposed by Loureiro<sup>1</sup> in 1790 for two species from CochinChina, *Melodorum fruticosum* Lour. and *M. arboreum* Lour., of which the first is manifestly the type of the genus. While the description is not very definite, and while manifestly the fruit characters are based on material from some plant different from the type and in all probability not congeneric with it, it seems to be distinctly advisable to investigate the status of the genus in view of the misinterpretation of it in all modern botanical literature.

Fortunately for the purpose of this investigation Loureiro's type of *Melodorum fruticosum* is preserved in the herbarium of the British Museum, and through the kindness of Dr. A. B. Rendle and Mr. J. G. Baker I have been supplied with a sketch of it with certain notes regarding the specimen. The material consists of a leafy branch with the broken pieces of a flower, from which it was possible to sketch an entire petal.

After receiving the sketch mentioned above it was matched by material in the herbarium of the Bureau of Science and in order to verify my interpretation of Loureiro's species fragments of several specimens were forwarded to the British Museum for purposes of direct comparison with Loureiro's type. In reference to this material Doctor Rendle notes under date of July 3, 1919:

Loureiro's plant is very much like the one labeled *Polyalthia siamensis* Boerl., cult. Hort. Bog.; the large petals seem identical in form but the

<sup>1</sup> Fl. Cochinch. (1790) 351.



prominent lateral veins of the leaf are rather less numerous (about 10 or 11 on each side) in Loureiro's plant, and also slightly farther apart. The twigs are also thicker in Loureiro's specimen. We find nothing that agrees better with it.

Dunal<sup>2</sup> seems to be the first author to adopt Loureiro's generic name, making it a section of the genus *Unona*. He referred both of Loureiro's species to *Unona*; *Melodorum fruticosum* Lour. = *Unona dumetorum* Dunal and *Melodorum arboreum* Lour. = *Unona sylvatica* Dunal. He saw no specimen but interpreted both species from Loureiro's descriptions. In proposing the section *Melodorum*, Dunal referred to it several other species; *Unona latifolia* Dunal = *Melodorum latifolium* Hook. f. & Th., *U. lucida* DC. = *Xylopiopsis longifolia* A. DC., *Unona acutiflora* Dunal = *Xylopiopsis* sp., *Unona xylopioides* Dunal, and *Unona polycarpa* DC. = *Xylopiopsis polycarpa* Oliv.

In current botanical literature the authority for the generic name *Melodorum* is given as Hooker f. and Thomson,<sup>3</sup> but these authors credit the authority for the genus to Dunal, citing as synonyms *Unona*, section *Melodorum* Dunal; *Uvaria*, section *Melodorum* Blume; and *Polyalthia*, section *Kentia* Blume. Hooker f. and Thomson apparently interpreted the genus largely from the first species cited by Dunal; namely, the Malayan one currently known as *Melodorum latifolium* (Dunal) Hook f. & Th., described and figured by Blume as *Uvaria latifolia* Blume.<sup>4</sup>

Hooker f. and Thomson examined Loureiro's type of *Melodorum fruticosum* in the herbarium of the British Museum with the following comment:

Loureiro's *Melodorum* is different, as we have determined by an inspection of the materials in the British Museum. In that collection there is an authentic specimen of *M. fruticosum* Lour., which is an undescribed plant, of doubtful affinity, as we have not examined the flower, but certainly not belonging to this genus. It has no fruit. There is no authentic specimen of *M. arboreum* Lour., but it is described as a large tree and is perhaps a *Mitrephora*.

While they excluded both of Loureiro's species from *Melodorum*, Hooker f. and Thomson considered it advisable to retain the generic name in the sense in which it was interpreted (in part) by Dunal and by Blume (as a section of *Unona* and of *Uvaria*). All subsequent authors have been content to follow Hooker f. and Thomson, and we hence have an entirely illogical

<sup>2</sup> Monogr. Fam. Anon. (1817) 98, 115, 116.

<sup>3</sup> Fl. Ind. (1855) 112.

<sup>4</sup> Fl. Jav. Anon. (1828) 37, t. 15, 25A.



case of a generic name proposed by Loureiro currently applied to a group of species quite different from Loureiro's original conception of the genus.

From an examination of the sketch of Loureiro's type kindly prepared by Mr. J. G. Baker I am confident that *Melodorum fruticosum* Lour. is the species currently known as *Polyalthia aberrans* Maingay and which has been variously described by several authors as *Polyalthia affinis* Teysm. & Binn., *P. siamensis* Boerl., and *Unona mesneyi* Pierre, and which was eventually transferred to *Popowia* by Pierre as *Popowia aberrans* Pierre. From this I cannot distinguish *Popowia diospyrifolia* Pierre by any satisfactory characters. Pierre<sup>5</sup> has given a detailed account of the characters of this species, indicating that it approaches *Popowia* in certain respects, but concluding that it cannot be referred to Endlicher's genus. He found that it is, in most respects, a *Polyalthia* but proposed for it the group name *Mesneya*, as a subgenus of *Unona*. Safford<sup>6</sup> has clearly shown that the so-called Old World species of *Unona* have nothing to do with *Unona* as originally described by the younger Linnaeus, this being an American genus, the proper generic name for the Old World species being *Desmos* Lour. King<sup>7</sup> notes that *Polyalthia aberrans* Maing., as interpreted by him, "save, and except in the much smaller size of the flowers," much resembles the plant figured and described by Pierre under the name of *Unona mesneyi*, and to which Pierre reduced *Polyalthia aberrans*. An examination of CochinChina material now available to me for study and comparison shows that the size of the flowers in Pierre's drawing is greatly exaggerated, and that they are drawn all out of proportion to the leaves.

In interpreting the true status of *Melodorum* as described by Loureiro, we find that the type of the genus is a species aberrant in all of the genera in which it has been placed. It is to be noted that Pierre proposed for it the group name *Mesneya* (as a subgenus), and that Scheffer, quoted by Boerlage,<sup>8</sup> proposed for the same form the generic term *Sphaerocoryne*. For the present it seems best to retain *Melodorum* as a genus closely allied to *Popowia*, for which the names *Mesneya* Pierre and *Sphaerocoryne* Scheffer are exact synonyms. *Polyalthia*

<sup>5</sup> Fl. Forest. Cochinch. 1 (1880) t. 17.

<sup>6</sup> Bull. Torr. Bot. Club 39 (1912) 501-508.

<sup>7</sup> Ann. Bot. Gard. Calcutta 4 (1893) 78.

<sup>8</sup> Boerl. in Ic. Bogor. 1 (1899) 196, in nota sub *Polyalthia siamensis* Boerl.



Blume may then be retained for the numerous Indo-Malayan species currently so called, but the various species of *Melodorum* of all authors except Loureiro will need a new generic name, for which *Fissistigma* Griff. is available.

#### MELODORUM Loureiro

MELODORUM FRUTICOSUM Lour. Fl. Cochinch. (1790) 351.

*Unona dumetorum* Dunal Monog. Anon. (1817) 31.

*Polyalthia* (?) *aberrans* Maingay in Hook. f. Fl. Brit. Ind. 1 (1874) 67; King in Ann. Bot. Gard. Calcutta 4 (1893) 78, t. 109A.

*Polyalthia affinis* Teysm. & Binn. in Nat. Tijdschr. Nederl. Ind. 27 (1864) 37; Boerl. in Ic. Bogor. 1 (1899) 124, 183, t. 63.

*Polyalthia siamensis* Boerl. in Ic. Bogor. 1 (1899) 124, 195, t. 69.

*Sphaerocoryne siamensis* Scheff. ex Boerl. l. c. in syn.

*Popowia aberrans* Pierre ex Finet & Gagnep. in Bull. Soc. Bot. France 53 (1906) Mem. 4: 109, et in Lecomte Fl. Gén. Indo-Chine 1 (1907) 83.

*Unona mesneyi* Pierre Fl. Forest. Cochinch. 1 (1880) t. 17.

*Popowia diospyrifolia* Pierre ex Finet & Gagnep. in Bull. Soc. Bot. France 53 (1906) Mém. 4: 110, et in Lecomte op. cit. 84, t. 10, f. 11-19.

*Melodorum glaucum* Scortech. ex King in Ann. Bot. Gard. Calcutta 4 (1893) 78, in syn.

*Melodorum clavipes* Hance in Journ. Bot. 15 (1877) 328.

There may be more than one species represented here, but if so they are very closely allied. According to Loureiro (*Melodorum fruticosum*), Boerlage (*Polyalthia affinis* Teysm. & Binn., *P. siamensis* Boerl.), Pierre (*Unona mesneyi* Pierre), and Gagnepain (*Popowia aberrans* Pierre, *P. diospyrifolia* Pierre), it is an erect shrub or small tree, but according to Maingay and King it is a scandent shrub. The difference between *Polyalthia siamensis* Boerl. (*Polyalthia aberrans* Maing.) and *P. affinis* Teysm. & Binn. appears to me to be trivial. As between *Popowia aberrans* Pierre and *P. diospyrifolia* the same statement holds, the distinguishing character depended upon being only that of the stigma. It is to be noted that Finet and Gagnepain consider that Pierre's drawing of *Unona mesneyi*, as to the habit sketch, is *Popowia aberrans* Pierre, and as to the details of the flower, *P. diospyrifolia* Pierre.

The species extends from Indo-China to Siam and the Malay Peninsula and is in cultivation at Buitenzorg, Java. I have examined the following specimens: Indo-China, Loureiro (sketch of Loureiro's type as preserved in the herbarium of the British Museum, flowering specimen), Thorel 391 (det. by Gagnepain as *Popowia diospyrifolia* Pierre, flowering specimen): Malay Peninsula, Pungah, Curtis 2957; Goping, Kunstler 6136; Ma-



lacca, Burkill 2510; Perak, Scortechini 1946 (all these distributed as *Polyalthia aberrans* Maing., flowering specimens): Java, cult. Hort. Bogor XI-A-41-71 (four sheets, *Polyalthia siamensis* Boerl., flowering specimens from the type plant), XI-A-63 (*Polyalthia affinis* Teysm. & Binn., flowering and fruiting specimens).

As several detailed descriptions of this species, as well as no less than four illustrations of it, with details of the flowers and fruits, have been published, it would seem that a further description is unnecessary. The genus *Melodorum* Lour., as I understand it, contains a single definitely known species, which while well defined and characteristic as a species presents a combination of characters which render it somewhat difficult to separate *Melodorum* from several not closely allied genera. It is clearly no *Unona* (that is, *Desmos*); and it is equally aberrant in *Polyalthia* and in *Popowia*, the two other genera in which it has been placed. I am personally of the opinion that *Melodorum* as originally described by Loureiro and typified by *Melodorum fruticosum* Lour. (not of modern authors) is a valid genus, more closely allied to *Popowia* than to *Polyalthia*, and that it belongs in the tribe *Mitrephorae*. Pierre in his critical discussion of *Unona mesneyi* notes that Maingay described the inner petals as imbricate in bud, but that he found them to be perfectly valvate in Wallich's specimen. Both series of petals touch by their thickened margins, and those of the inner series remain in this position long after anthesis. I have seen no fresh material of *Melodorum fruticosum*, but the figures given by Pierre, Boerlage, and King present the outer series of petals as more or less spreading in anthesis; in all the herbarium specimens examined by me none of the petals are spreading. The persistent valvate position of the inner petals is a character by which the genus can be readily distinguished from *Polyalthia* and all the other genera in the tribe *Unonae*; while in the *Mitrephorae* it is readily distinguished from *Fissistigma* Griff. (*Melodorum* auct., non Lour.) by its globose buds and more or less spreading (?) outer petals; from *Popowia* Endl., which seems to be its true alliance, it differs entirely not only in its facies, but also in its larger, long-pedicelled flowers; in its outer petals, which are much larger and entirely different from the sepals; and by the inner petals being valvate by their much thickened margins but not connivent.

*Melodorum arboreum* Lour.<sup>9</sup> = *Unona sylvatica* Dunal,<sup>10</sup> the

<sup>9</sup> Fl. Cochinch. (1790) 351.

<sup>10</sup> Monog. Anon. (1817) 91.



second species of the genus described by Loureiro, is one of doubtful status, but in all probability is not congeneric with *Melodorum fruticosum* Lour. It is described as a large tree growing in forests, the leaves tomentose beneath, the calyx and corolla as in *Melodorum fruticosum* Lour. The indicated floral characters can be considered as no more than approximate. Hooker f. and Thomson have suggested that this may prove to be a *Mitrephora* and, from the description and the various species of *Mitrephora* now known from Indo-China, I strongly suspect that Loureiro's species is the same as *Mitrephora thorelii* Pierre.

It is perfectly evident that whatever disposition be made of *Melodorum* as originally described by Loureiro, whether it be considered as a valid genus allied to *Popowia*, or whether it be considered as synonymous with *Popowia*, or with *Polyalthia*, it can no longer be retained in the sense in which it is currently used; that is, as erroneously interpreted by Hooker f. and Thomson. The genera proposed by other authors currently considered as synonyms of *Melodorum* Hook. f. & Th., are *Fissistigma* Griff. (1854), *Mitrella* Miq. (1865), and *Pyramidanthe* Miq. (1865). Of these *Fissistigma* Griff. is an exact synonym of *Melodorum* as interpreted by Hooker f. and Thomson and antedates *Melodorum* as used by the latter authors by one year. It is typified by *Fissistigma scandens* Griff.<sup>11</sup> I accordingly propose to adopt Griffith's generic name for the numerous species currently but erroneously known as *Melodorum*. Boerlage<sup>12</sup> retains *Kentia* Miq. and *Pyramidanthe* Miq. as valid genera allied to *Melodorum* Hook. f. & Th., that is, *Fissistigma* Griff.; but in this consideration of the case I have followed current usage and have reduced both to *Fissistigma*.

#### FISSISTIGMA Griffith

(*Melodorum* auct. plur., non Lour.)

#### FISSISTIGMA AFRICANUM (Benth.).

*Melodorum africanum* Benth. in Trans. Linn. Soc. 23 (1862) 477.

Africa.

#### 2782 FISSISTIGMA BALANSAE (Aug. DC.).

*Melodorum balansae* Aug. DC. in Bull. Herb. Boiss. II 4 (1904) 1070;  
Finet & Gagnep. in Lecomte Fl. Gén. Indo-Chine 1 (1907) 104.

Indo-China.

<sup>11</sup> Notul. 4 (1854) 706.

<sup>12</sup> Ic. Bogor. 1 (1899) 129, 130.



**FISSISTIGMA BECCARII** (Scheff.).

*Melodorum beccarii* Scheff. in Ann. Jard. Bot. Buitenz. 2 (1885) 24.  
*Mitrella beccarii* Diels in Engl. Bot. Jahrb. 49 (1912) 149.

New Guinea.

**FISSISTIGMA BICOLOR** (Roxb.).

*Uvaria bicolor* Roxb. Fl. Ind. ed. 2, 2 (1832) 662.  
*Melodorum bicolor* Hook. f. & Th. Fl. Ind. (1855) 119; King in Ann.  
 Bot. Gard. Calcutta 4 (1894) 133, t. 175B.

Eastern Himalayan region to Assam and Burma.

**FISSISTIGMA BORNEENSE** (Miq.)

*Melodorum borneense* Miq. in Ann. Mus. Bot. Lugd.-Bat. 2 (1865)  
 36.

Borneo.

**FISSISTIGMA CINERASCENS** (Miq.).

*Melodorum cinerascens* Miq. Ann. Mus. Bot. Lugd.-Bat. 2 (1865) 37.

Sumatra.

**FISSISTIGMA CHRYSOSERICIUM** (Finet & Gagnep.).

*Melodorum chrysosericeum* Finet & Gagnep. in Bull. Soc. Bot. France  
 54 (1907) 88, et in Lecomte Fl. Gén. Indo-Chine 1 (1907) 98, f. 12.

Indo-China, *Thorel 2429!*

**FISSISTIGMA CYLINDRICUM** (Maingay).

*Melodorum cylindricum* Maingay in Hook. f. Fl. Brit. Ind. 1 (1872)  
 80; King in Ann. Bot. Gard. Calcutta 4 (1893) 136, t. 177B.  
*Melodorum cylindraceum* Boerl. in Ic. Bogor. 1 (1899) 133.

Malay Peninsula, Singapore, Borneo, *Ridley 1823!*, s. n.!

**FISSISTIGMA ELEGANS** (Wall.).

*Uvaria elegans* Wall. Cat. (1832) No. 6474A, *nomen nudum*.  
*Melodorum elegans* Hook. f. & Th. Fl. Ind. (1855) 122; King in Ann.  
 Bot. Gard. Calcutta 4 (1893) 141, t. 184B.

Malay Peninsula, Penang, *Wray 1079!*, *King's collector 6367!*,  
*Kunstler 5115!*, *Ridley 13516!*, s. n.!

**FISSISTIGMA FAGIFOLIUM** (Ridl.).

*Melodorum fagifolium* Ridl. in Kew Bull. (1912) 286.

Borneo, *Hose 397!*

**FISSISTIGMA FULGENS** (Wall.).

*Uvaria fulgens* Wall. Cat. (1832) No. 6482, *nomen nudum*.  
*Mitrephora fulgens* Hook. f. & Th. Fl. Ind. (1855) 120; King in  
 Ann. Bot. Gard. Calcutta 4 (1893) 132, t. 174.

Malay Peninsula, Singapore, Borneo (not in the Philippines!),  
*Kunstler 2654!*, *Haniff & McNur 2317!*, *Wray 2441!* *Ridley 4587!*



1636  
FISSISTIGMA GLAUDESCENS (Hance).

*Melodorum glaucescens* Hance in Journ. Bot. 19 (1881) 112.

Hongkong.

FISSISTIGMA HYPOGLAUCUM (Miq.).

*Melodorum hypoglaucum* Miq. Ann. Mus. Bot. Lugd.-Bat. 2 (1865) 37; King in Ann. Bot. Gard. Calcutta 4 (1893) 136, t. 180A.

Malay Peninsula, Borneo, Sumatra, King's collector 5060!, 5806!, 1022!

FISSISTIGMA KENTII (Blume).

*Unona kentii* Blume Bijdr. (1825) 16.

*Polyalthia kentii* Blume Fl. Jav. Anon. (1828) 77, t. 38, 52A.

*Melodorum kentii* Hook. f. & Th. Fl. Ind. (1855) 116.

*Mitrella kentii* Miq. Ann. Mus. Bot. Lugd.-Bat. 2 (1865) 39; Boerl. in Ic. Bogor. 1 (1899) 130, t. 43, f. C.

Java, cult. Hort. Bogor. XI-A-29-64! Boerlage, l. c., retains this as a distinct genus.

FISSISTIGMA KINABALUENSE (Stapf).

*Melodorum kinabaluense* Stapf in Trans. Linn. Soc. Bot. 4 (1894) 130.

Borneo.

FISSISTIGMA KORTHALSII (Miq.).

*Melodorum korthalsii* Miq. Ann. Mus. Bot. Lugd.-Bat. 2 (1865) 37.

Borneo.

FISSISTIGMA LANUGINOSUM (Hook. f. & Th.).

*Melodorum lanuginosum* Hook. f. & Th. Fl. Ind. (1855) 117; in Ann. Bot. Gard. Calcutta 4 (1893) 138, t. 182.

*Uvaria tomentosa* Wall. Cat. (1832) No. 6454, *nomen nudum*.

Malay Peninsula, Penang, Singapore, Indo-China, King's collector 4664!, 7890!, 4581!, Hullett s. n.!, Ridley s. n.!

2776  
FISSISTIGMA LATIFOLIUM (Dunal).

*Unona latifolia* Dunal Monog. Anon. (1817) 115.

*Uvaria longifolia* Blume Bijdr. (1825) 13.

*Uvaria latifolia* Blume Fl. Jav. Anon. (1828) 37, t. 15.

*Melodorum mollissimum* Miq. Fl. Ind. Bat. Suppl. (1861) 374.

*Melodorum latifolium* Hook. f. & Th. Fl. Ind. (1855) 116; King in Ann. Bot. Gard. Calcutta 4 (1894) 135, t. 178.

Malay Peninsula (Perak), Java, Mt. Salak, *ex herb. Bogor!* collector not indicated. Borneo, Indo-China, fide Gagnepain, Moluccas.



The type of this species is *Cananga sylvestris* III *latifolia* Rumph.<sup>13</sup> of Amboina. The species is currently interpreted from Blume's figure and description which were based on Javan material. Boerlage expresses the opinion that *Melodorum mollissimum* Miq. is specifically distinct from *M. latifolium* Hook. f. & Th.

**FISSISTIGMA LEICHHARDTII** (Benth.).

*Melodorum leichhardtii* Benth. Fl. Austral. 1 (1863) 52.

Australia (Queensland, N. S. Wales), *White! Boorman!*

**FISSISTIGMA LITSAEFOLIUM** (King).

*Melodorum litsaefolium* King in Journ. As. Soc. Beng. 61<sup>2</sup> (1889) 103, Ann. Bot. Gard. Calcutta 4 (1893) 132, t. 173.

Malay Peninsula, Perak, *King's collector 4986!, 4063.*

**FISSISTIGMA LONGIPETALUM** (Ridl.).

*Melodorum longipetalum* Ridl. in Kew Bull. (1912) 387.

Borneo.

**FISSISTIGMA MABIFORME** (Griff.).

*Uvaria mabiformis* Griff. Notul. 4 (1854) 709.

*Melodorum pisocarpum* Hook. f. & Th. Fl. Ind. (1855) 123; King in Ann. Bot. Gard. Calcutta 4 (1893) 142, t. 187A.

*Melodorum pyramidale* Maingay ex King l. c. in syn.

Malay Peninsula, Singapore, Sumatra, *King's collector 6411!, 10602!, Forbes 2182!, Ridley s. n.!*

**FISSISTIGMA MACCREAI** (F. Muell.).

*Melodorum maccreai* F. Muell. Fragm. 6 (1867) 176.

Australia.

**FISSISTIGMA MACRANTHUM** (Kurz).

*Melodorum macranthum* Kurz in Journ. As. Soc. Beng. 41<sup>2</sup> (1872) 291; King in Ann. Bot. Gard. Calcutta 4 (1892) 140, t. 186.

*Unona macrantha* Kurz in Andam. Rep. (1867) App. B. I.

*Pyramidanthe macrantha* Kurz op. cit. ed. 2 (1870) 29.

South Andaman, *Kurz!*

**FISSISTIGMA MAINGAYI** (Hook. f. & Th.).

*Melodorum maingayi* Hook. f. & Th. Fl. Ind. (1855) 139; King in Ann. Bot. Gard. Calcutta 4 (1893) 139, t. 184A.

Malay Peninsula, Penang, Borneo, *Wray 1112!*

<sup>13</sup> Herb. Amb. 2: 198.



## FISSISTIGMA MANUBRIATUM (Wall.).

*Uvaria manubriata* Wall. Cat. (1832) No. 6456, *nomen nudum*.

*Melodorum manubriatum* Hook. f. & Th. Fl. Ind. (1855) 118; King in Ann. Bot. Gard. Calcutta 4 (1893) 134, t. 176.

*Melodorum bancanum* Scheff. in Nat. Tijdschr. Nederl. Ind. 31 (1870) 343, Flora 53 (1870) 244.

Malay Peninsula, Penang, Bangka, Borneo, *Kunstler 7832!*, *King's collector 4948!*, *5786!*, *Ridley 4712!*, *Cult. Hort. Bogor. XVI-E-107!*, *XI-A-45-67!*

## FISSISTIGMA OBLONGUM (Craib).

*Melodorum oblongum* Craib in Kew Bull. (1914) 5.

Siam, *Kerr 1879!*

## FISSISTIGMA OLDHAMII (Hemsl.).

*Melodorum oldhamii* Hemsl. in Journ. Linn. Soc. Bot. 23 (1886) 27.

Formosa, Southern China, *Dunn 6339!*, *Faurie 430!*, *Tutcher 1052!*, *Japanese collector 1292!*

## FISSISTIGMA OVALIFOLIUM (Ridl.).

*Melodorum ovalifolium* Ridl. in Kew Bull. (1912) 387.

Borneo.

## FISSISTIGMA OVOIDEUM (King).

*Melodorum latifolium* Hook. f. & Th. var. *ovoidea* King in Journ. As. Soc. Beng. 61<sup>2</sup> (1892) 106, Ann. Bot. Gard. Calcutta 4 (1893) 135, t. 179.

Malay Peninsula, Singapore, *King's collector 8119!*, *10418!*, *Burkill!*

This differs remarkably from the typical form of *Melodorum latifolium* as figured and described by Blume in its very much larger, entirely different fruits, and is certainly worthy of specific rank.

## FISSISTIGMA PALLENS (Finet &amp; Gagnep.).

*Melodorum pallens* Finet & Gagnep. in Bull. Soc. Bot. France 53 (1906) Mém. 4: 137, et in Lecomte Fl. Gén. Indo-Chine 1 (1907) 100, t. 11, f. 7-11.

Indo-China.

## FISSISTIGMA PANICULATUM (Ridl.).

*Melodorum paniculatum* Ridl. in Kew Bull. (1912) 386.

Borneo.



**FISSISTIGMA PARVIFLORUM** (Scheff.).

*Melodorum parviflorum* Scheff. in Nat. Tijdschr. Nederl. Ind. 31 (1870) 344, Flora 53 (1870) 244; King in Ann. Bot. Gard. Calcutta 4 (1893) 137, t. 181.

Malay Peninsula, Bangka, Borneo, *King's collector 7276! 8366!, 6498!*

**FISSISTIGMA POLYANTHOIDES** (Aug. DC.).

*Melodorum polyanthoides* Aug. DC. in Bull. Herb. Boiss. II 4 (1904) 1070; Finet & Gagnep. in Lecomte Fl. Gén. Indo-Chine 1 (1907) 103.

Indo-China, *Thorel 2431!*

**FISSISTIGMA POLYANTHUM** (Wall.).

*Uvaria polyantha* Wall. Cat. (1831) No. 6467, *nomen nudum*.

*Melodorum polyanthum* Hook. f. & Th. Fl. Ind. (1855) 121; King in Ann. Bot. Gard. Calcutta 4 (1893) 131, t. 172A.

Chittagong.

**FISSISTIGMA PRISMATICUM** (Hook. f. & Th.).

*Melodorum polyanthum* Hook. f. & Th. Fl. Ind. (1855) 121; King in Ann. Bot. Gard. Calcutta 4 (1894) 140, t. 185.

*Uvaria rufa* Wall. Cat. (1832) No. 6455, *nomen nudum*.

*Pyramidanthe rufa* Miq. Ann. Mus. Bot. Lugd.-Bat. 2 (1863) 39; Boerl. in Ic. Bogor. 1 (1899) 130, t. 43, f. D.

*Oxymitra bassiaefolia* Teysm. & Binn. in Nat. Tijdschr. Nederl. Ind. 25 (1863) 419.

Malay Peninsula, Singapore, Borneo, *King's collector 5737!, 3932!, Baker 5705!*

Boerlage retains *Pyramidanthe* Miquel as a genus distinct from *Melodorum* (*Fissistigma*).

**FISSISTIGMA PUNCTULATUM** (Baill.).

*Melodorum punctulatum* Baill. in Adansonia 10 (1871) 107.

New Caledonia.

**FISSISTIGMA RIGIDUM** (Ridl.).

*Melodorum rigidum* Ridl. in Kew Bull. (1912) 386.

Borneo.

**FISSISTIGMA RUBIGINOSUM** (A. DC.).

*Uvaria rubiginosa* A. DC. in Mém. Soc. Phys. Genève. 5 (1832) 202.

*Uvaria nervosa* Wall. Cat. (1832) No. 6479, *nomen nudum*.

*Uvaria fulva* Wall. op. cit. No. 6427, *nomen nudum*.

*Melodorum rubiginosum* Hook. f. & Th. Fl. Ind. (1855) 138; King in Ann. Bot. Gard. Calcutta 4 (1893) 138, t. 183.

Sylhet to Chittagong, Tenasserim, Penang (var. *oblongum* King, *King's collector 5082!*), Indo-China, and Borneo.



## FISSISTIGMA RUFINERVE (Hook. f. &amp; Th.).

*Melodorum rufinerve* Hook. f. Th. Fl. Ind. 1 (1855) 121; King in Ann. Bot. Gard. Calcutta 4 (1893) 130, t. 171B.

India.

## FISSISTIGMA RUFUM (Presl).

*Anona rufa* Presl Rel. Haenk. 2 (1830) 75.

*Melodorum clementis* Merr. in Philip. Journ. Sci. 3 (1908) Bot. 136.

*Melodorum rufum* Merr. op. cit. 223.

This species was originally described from Luzon material and it extends from central Luzon to Mindanao. It is closely allied to *Fissistigma latifolium* (Dunal) Merr. (*Melodorum latifolium* Hook. f. & Th.), and Philippine specimens of it have been referred to the latter species.

## FISSISTIGMA SCANDENS Griff. Notul. 4 (1854) 706.

*Melodorum griffithii* Hook. f. & Th. Fl. Ind. (1855) 120; King in Ann. Bot. Gard. Calcutta 4 (1893) 131, t. 172B.

Burma, Indo-China.

## FISSISTIGMA SCHLECHTERI (Diels).

*Mitrella schlechteri* Diels in Engl. Bot. Jahrb. 49 (1912) 150.

New Guinea.

## FISSISTIGMA SCHEFFERI (Pierre).

*Melodorum schefferi* Pierre ex Finet & Gagnep. in Bull. Soc. Bot. France 53 (1906) Mém. 4: 134, et in Lecomte Fl. Gén. Indo-Chine 1 (1907) 99, t. 13, f. 1-8.

Indo-China.

MELODORUM SPHAEROCARPUM (Blume) Miq. Fl. Ind. Bat. 1<sup>2</sup> (1858)

35; King in Ann. Bot. Gard. Calcutta 4 (1893) 137, t. 180B.

*Unona sphaerocarpa* Blume Bijdr. (1825) 12, Fl. Jav. Anon. (1828) 39, t. 16.

Malay Peninsula, Java, King's collector 4002!, Backer 25558!

## FISSISTIGMA THORELII (Pierre).

*Melodorum thorelii* Pierre ex Finet & Gagnep. in Bull. Soc. Bot. France 53 (1906) Mém. 4: 133, et in Lecomte Fl. Gén. Indo-Chine 1 (1907) 97, t. 14, f. 1-6.

Indo-China.

## FISSISTIGMA TONKINENSE (Finet &amp; Gagnep.).

*Melodorum tonkinense* Finet & Gagnep. in Bull. Soc. Bot. France 53 (1906) Mém. 4: 135, et in Lecomte Fl. Gén. Indo-Chine 1 (1907) 100, t. 12, f. 1-6.

Indo-China.



## FISSISTIGMA UHRII (F. Muell.).

*Melodorum uhrii* F. Muell. *Fragm.* 6 (1867) 2.

Australia.

## 2775 FISSISTIGMA UONICUM (Dunn).

*Melodorum uonicum* Dunn in *Journ. Bot.* 48 (1910) 323.

Hongkong.

## FISSISTIGMA VERRUCOSUM (Hook. f. Th.).

*Melodorum verrucosum* Hook. f. & Th. *Fl. Ind.* (1855) 119; King in *Ann. Bot. Gard. Calcutta* 4 (1893) 134, *t.* 177A.

India. The Hainan specimen referred here by Hance probably represents some other species.

## 2771 FISSISTIGMA WALLICHII (Hook. f. &amp; Th.).

*Melodorum wallichii* Hook. f. & Th. *Fl. Ind.* (1855) 118; King in *Ann. Bot. Gard. Calcutta* 4 (1894) 133, *t.* 175A.*Uvaria bicolor* Wall. *Cat.* (1832) No. 6466, *nomen nudum*, non Roxb.

Assam, Khasia, and Sylhet.

## FISSISTIGMA ZIPPELII (Miq.).

*Melodorum zippelii* Miq. *Ann. Mus. Bot. Lugd.-Bat.* 2 (1865) 38.

Sumatra.

## DOUBTFUL AND EXCLUDED SPECIES

MELODORUM MICRANTHUM Warb. in *Engl. Bot. Jahrb.* 18 (1893) 190 = *Papualthia longirostris* (Scheff.) Diels in *Engl. Bot. Jahrb.* 49 (1912) 140, *f.* 1, *G-H* (*Goniothalamus longirostris* Scheff., *G. inaequilaterus* K. Schum. & Lauterb.).

MELODORUM LEFEVRII Baill. in *Adansonia* 10 (1871) 108. The type was from Indo-China. I can find no mention of the species in Finet & Gagnepain's treatment of the Annonaceae of Indo-China in *Lecomte Fl. Gén. Indo-Chine* 1 (1917) 42-123.